The absorbance (symbol: A), usually the y axis of a uv spectrum, is defined as follows.

\[ A = \log \left( \frac{I_0}{I} \right) \]

- If the sample absorbs no light,
  \[ I = I_0, \]
  \[ \frac{I_0}{I} = 1, \]
  \[ A = \log \frac{I_0}{I} = \log 1 = 0. \]

- If the sample absorbs light,
  \[ I < I_0, \]
  \[ \frac{I_0}{I} > 1, \]
  \[ A = \log \frac{I_0}{I} > 0. \]

Thus, the greater the amount of the light absorbed by the sample, the larger the absorbance.

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Contributors
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